

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/29/03

Date Received: 05/22/03

Project: Metro KC Grab, PO# M90913, F&BI 305199

Date Extracted: 05/22/03

Date Analyzed: 05/23/03

**RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE
FOR TOTAL METALS BY
INDUCTIVELY COUPLED PLASMA (ICP)
(METHOD 6010)**

Results Reported as mg/L (ppm)

<u>Sample ID</u> Laboratory ID	<u>Chromium</u>	<u>Copper</u>	<u>Nickel</u>	<u>Zinc</u>
M90913 305199-01	0.62	0.78	0.84	0.12
Method Blank	<0.05	<0.05	<0.05	<0.10

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QUALITY ASSURANCE RESULTS FROM TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 305199-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference	Acceptance Criteria
Chromium	mg/L (ppm)	0.62	0.62	0	0-20
Copper	mg/L (ppm)	0.78	0.79	1	0-20
Nickel	mg/L (ppm)	0.84	0.86	2	0-20
Zinc	mg/L (ppm)	0.12	0.12	0	0-20

Laboratory Code: 305199-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	% Recovery MS	Acceptance Criteria
Chromium	mg/L (ppm)	2	0.62	90	80-120
Copper	mg/L (ppm)	2	0.78	93	80-120
Nickel	mg/L (ppm)	4	0.84	91	80-120
Zinc	mg/L (ppm)	2	0.12	91	80-120

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	% Recovery LCS	% Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Chromium	mg/L (ppm)	2	100	101	80-120	1
Copper	mg/L (ppm)	2	102	102	80-120	0
Nickel	mg/L (ppm)	4	100	101	80-120	1
Zinc	mg/L (ppm)	2	105	101	80-120	4

305199

SAMPLE CHAIN OF CUSTODY

CM 05/22/03 AI

Send Report To

G. Thompson

Company

ACW

Address

628 S. Harbor

City, State, ZIP

Seattle WA

Phone #

206-382-8379

Fax #

206-382-8300

SAMPLERS (signature)

PROJECT NAME/NO.

METRO KC GRAB

PO #

M90913

REMARKS

ASAP

Page # of

TURNAROUND TIME

☐ Standard (2 Weeks)☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Return samples☐ Will call with instructions

ANALYSES REQUESTED

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Other	Notes
M90913	01	5/22/03	11:30	H2O	1								

Friedman & Bruya, Inc.
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE

Relinquished by:

Received by:

Relinquished by:

Received by:

PRINT NAME

COMPANY

DATE

TIME

G. Thompson

ACW

5/22/03

2:00

Tara E. Debraff

F+BI

05/22/03

2:00

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Charlene Morrow, M.S.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
FAX: (206) 283-5044
e-mail: fbi@isomedia.com

May 29, 2003

DUPLICATE COPY

INVOICE # 03ACU0529-2

Accounts Payable
Alaskan Copper Works
628 South Hanford
Seattle, WA 98134

RE: Project Metro KC Grab, PO# M90913, F&BI 305199 - Results of testing
requested by Gerry Thompson for material submitted on May 22, 2003.

1 sample analyzed for Total Chromium, Copper, Nickel and Zinc
by Method 6010B @ \$80 per sample \$ 80.00

Amount Due \$ 80.00

FEDERAL TAX ID #(b) (6)

FRIEDMAN & BRUYA, INC.

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May 29, 2003

Gerry Thompson, Project Manager
Alaskan Copper Works
628 South Hanford
Seattle, WA 98134

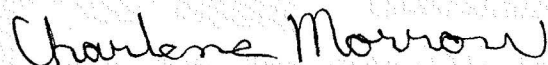
Dear Mr. Thompson:

Included are the results from the testing of material submitted on May 22, 2003 from the Metro KC Grab, PO# M90913, F&BI 305199 project. There are 2 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Charlene Morrow
Chemist

Enclosures
ACU0529R.DOC